

## What is Claimed is:

- [c1] A method for generating an enhanced thumbnail associated with a document, comprising:
- obtaining a document comprising a plurality of elements;
  - generating a reduced-size representation of the document; and
  - modifying an appearance of at least one visible element of the plurality of elements relative to other visible elements of the plurality of elements in the reduced-size representation.
- [c2] The method according to claim 1, wherein modifying the appearance of the at least one visible element comprises modifying the appearance of the at least one visible element while in a document format.
- [c3] The method according to claim 2, wherein modifying the appearance of the at least one visible element includes modifying at least one of size, color and font of the at least one visible element relative to other visible elements of the plurality of elements.
- [c4] The method according to claim 1, wherein modifying the appearance of the at least one visible element comprises overlaying an overlay element on or near the reduced-size representation in association with the at least one visible element.
- [c5] The method according to claim 4, wherein the overlay element comprises one or more of an enlarged version of the visible element, a highlighted version of the visible element, a zoom of the visible element, a callout visibly connected with the visible element, a blurry text version of the visible element, a perspective text version of the visible element, and an arrow pointing to the visible element.
- [c6] The method according to claim 1, further comprising identifying at least one element of the plurality of elements as an important element, wherein modifying the appearance of at least one visible element comprises modifying the appearance of the important element.
- [c7] The method according to claim 6, wherein modifying the appearance of the important element comprises overlaying a modified version of the important

element on or near the reduced-size representation.

[c8] The method according to claim 7, wherein the modified version of the important element is overlaid as a semi-transparent overlay that allows an underlying portion of the reduced-size representation to be partially visible.

[c9] The method according to claim 6, wherein the important element includes one or more of a header of the document and a keyword input by a user.

[c10] The method according to claim 6, wherein modifying the appearance of the important element comprises modifying the appearance of the important element while in a document format.

[c11] The method according to claim 10, wherein modifying the appearance of the important element includes modifying at least one of size, color and font of the important element relative to other elements of the plurality of elements.

[c12] The method according to claim 1, wherein the at least one visible element comprises first and second visible elements, further comprising determining relevance of the first and second elements, the first visible element being determined to have a higher relevance than the second visible element, wherein modifying the appearance of the at least one element comprises modifying the first visible element with a different modification than the second visible element.

[c13] The method according to claim 1, wherein modifying the appearance of the at least one element comprises modifying an appearance of the reduced-size representation as a whole.

[c14] The method according to claim 13, wherein modifying an appearance of the reduced-size representation as a whole comprises modifying contrast of the reduced-size representation.

[c15] The method according to claim 14, wherein modifying contrast comprises applying a color wash to the reduced-size representation.

[c16] A method for generating an enhanced thumbnail of a document, comprising:

obtaining a document comprising a plurality of elements;  
modifying an appearance of at least one visible element of the plurality of elements in the document;  
generating a reduced-size representation associated with the document, in which the modified at least one element retains a modified appearance relative to other elements of the document; and  
modifying an appearance of at least one of the plurality of elements in the reduced-size representation after generating the reduced-size representation.

[c17] The method according to claim 16, wherein modifying the appearance of at least one element of a plurality of elements in the reduced-size representation comprises modifying the at least one element that was modified prior to reducing the image.

[c18] The method according to claim 16, wherein modifying the appearance of at least one element of a plurality of elements in the reduced-size representation comprises modifying an element that was not modified prior to reducing the image.

[c19] The method according to claim 1, wherein the reduced-size representation is a reduced image.

[c20] A method for generating an enhanced thumbnail associated with a document, comprising:  
obtaining a document comprising a plurality of elements;  
generating a reduced image of the document; and  
modifying an appearance of at least one visible element of the plurality of elements relative to other elements of the plurality of visible elements in the reduced-size representation.

[c21] An apparatus for generating an enhanced thumbnail associated with a document, comprising:  
a renderer that generates a reduced-size representation of the document;  
and

at least one of (a) a document format modifier that modifies an appearance of at least one visible element of a plurality of elements of a document while the at least one element is in a document format, and (b) an image modifier that modifies an appearance of at least one visible element in the reduced-size representation.

[c22] The apparatus according to claim 21, wherein the document format modifier modifies the appearance of the at least one visible element by modifying at least one of size, color and font of the at least one visible element relative to other elements of the plurality of visible elements.

[c23] The apparatus according to claim 21, wherein the image modifier modifies the appearance of the at least one visible element in the reduced-size representation by overlaying an overlay element on or near the reduced-size representation in association with the at least one visible element.

[c24] The apparatus according to claim 23, wherein the overlay element comprises one or more of an enlarged version of the visible element, a highlighted version of the visible element, a zoom of the visible element, a callout visibly connected with the visible element, a blurry text version of the visible element, a perspective text version of the visible element, and an arrow pointing to the visible element.

[c25] The apparatus according to claim 21, wherein the document format modifier identifies at least one element of the plurality of visible elements as an important element, and modifies the appearance of the important element.

[c26] The apparatus according to claim 25, wherein the document format modifier modifies the appearance of the important element by modifying at least one of size, color and font of the important element relative to other elements of the plurality of visible elements.

[c27] The apparatus according to claim 25, wherein the important element includes one or more of a header of the document and a keyword input by a user.

[c28] The apparatus according to claim 21, wherein the image modifier identifies at

least one element of the plurality of visible elements as an important element, and modifies the appearance of the important element.

[c29] The apparatus according to claim 28, wherein the image modifier modifies the appearance of the important element by overlaying a modified version of the important element on or near the reduced-size representation.

[c30] The apparatus according to claim 29, wherein the modified version of the important element is overlaid as a semi-transparent overlay that allows an underlying portion of the reduced-size representation to be partially visible.

[c31] The apparatus according to claim 21, wherein the image modifier modifies an appearance of the reduced-size image as a whole.

[c32] The apparatus according to claim 31, wherein the image modifier modifies an appearance of the reduced-size image as a whole by modifying contrast of the reduced-size image.

[c33] The apparatus according to claim 32, wherein the image modifier modifies contrast by applying a color wash to the reduced-size representation.

[c34] The apparatus according to claim 21, including both the document format modifier and the image modifier.

[c35] The apparatus according to claim 34, wherein the at least one visible element modified in the document format and the at least one visible element modified in the reduced-size representation are the same element.

[c36] The apparatus according to claim 34, wherein the at least one visible element modified in the document format and the at least one visible element modified in the reduced-size representation are different elements.

[c37] The apparatus according to claim 21, wherein the reduced-size representation is a reduced image.

[c38] An apparatus for generating an enhanced thumbnail associated with a document, comprising:  
a renderer that generates a reduced image of the document; and

at least one of (a) a document format modifier that modifies an appearance of at least one visible element of a plurality of visible elements of a document while the at least one element is in a document format, and (b) an image modifier that modifies an appearance of at least one visible element in the reduced-size representation.

- [c39] A display device including the apparatus of claim 21.
- [c40] The display device of claim 39, wherein the display device is one of a file browser device, an email browser, a hierarchy browser, a system that displays thumbnails of applications of a personal computer, and a handheld device.
- [c41] An information storage medium on which is recorded a program for implementing the steps of claim 1.
- [c42] An information storage medium on which is recorded a program for implementing the steps of claim 16.